

Bond Reduction Impacts to the DOT Capital Plan

On November 13, 2018 the Department of Transportation released its \$12.1 billion five-year Capital Plan covering fiscal years 2019-2023. The Capital Plan includes all modes of land-based transportation. The Department anticipated a robust capital program in 2019 totaling well over \$2 billion, including 65-75 new projects valued at \$550-700 million. The list of projects comprising the Capital Plan and the accompanying narrative can be found at:

https://www.ct.gov/dot/lib/dot/documents/dcommunications/press_release/capital_plan/capital_plan_report_2019-2023.pdf

https://www.ct.gov/dot/lib/dot/documents/dcommunications/press_release/capital_plan/capital_plan_intro_2019-2023.pdf

The Department has been asked to consider reducing its capital program to fit within a reduced bonding program. The revised STO bonding limits were proposed at \$750 million for 2019, and then at \$800 million per year until 2023 when toll revenues would presumably supplement existing STF revenue and allow for a larger capital program. No GO bonding is anticipated to support the Department's programs.

These bonding limits would have significant impacts on our Capital Program, severely constricting the number of new projects that advance in the current, and future years. More information regarding these impacts is outlined in the analysis below.

This analysis is divided into 7 sections as follows:

1. Funding existing contracts and commitments
2. Funding new projects and ability to obligate all available federal funds
3. State-of-good-repair needs
4. Deferred projects and deferred maintenance
5. Risks
6. Impacts to others
7. Anticipated new revenue from tolls

Funding existing contracts and commitments

Based on the current 5-Year Capital Plan, and the cumulative effect of all prior year project commitments, STO Bond expenditures are anticipated to be in the \$850-\$900 million range for FFY 2019, and growing to \$1.4 billion by FY 2023. In FY 2019, and future years to a lessening degree, **the bulk of these expenditures will be associated with payments for prior year**

commitments - projects already underway. This means that **imposing the proposed bonding caps would severely limit the funding available for new projects** the Department plans to start in FY 2019 and future years.

Note that while the amount of funds budgeted for ongoing projects is a known quantity, exactly when these funds will be expended is an estimate. See the analysis below, which we believe provides a reasonable cash flow projection for ongoing projects, and the resulting balance of funds that will be available for new projects under the proposed bonding caps.

Projection of Cash Flow for STO Project Budgets Existing as of 10/1/18						
	As of Oct 1, 2018					
	Sum of Budget Balances					
Fund 13033	\$2,619,773,343					
Est. to be expended	95%	[1]				
Adjusted Total	\$2,488,784,676					
Fiscal Year	CORE Budgets as of 10/1/18	Est. Exp. for Prior Year Projects	Est. Budget At End of Year	% of Budget Balance Expended	Proposed Bond Sale Cap	Avail. For New Projects
2019	2,488,784,676	696,859,709	1,791,924,966	28%	750,000,000	53,140,291
2020	1,791,924,966	597,308,322	1,194,616,644	24%	800,000,000	202,691,678
2021	1,194,616,644	497,756,935	696,859,709	20%	800,000,000	302,243,065
2022	696,859,709	398,205,548	298,654,161	16%	800,000,000	401,794,452
2023	298,654,161	298,654,161	0	12%	800,000,000	501,345,839
				100%		
[1] Adjusts for an estimated 5% of project budgets that will never be expended						

Funding new projects and ability to obligate all available Federal Funds

With limited cash available to finance projects currently being advertised, or planned to be advertised in the coming years, the **first priority will be future projects programmed with federal funds**. In order to ensure that the approximate \$750 million of federal funds are fully obligated on an annual basis, an estimated \$135 million of state bonds are required as a match. It is likely that very few projects, other than those in the federal program, will be advanced in FY 2019, and a full analysis will need to be undertaken to determine what can be afforded within the cash flow available for FYs 2020-2023.

Projects most at risk are the state-funded projects, which include all of our grant programs (LOTICIP, Local Bridge, Town Aid Road, and Community Connectivity) and our preservation program (Vendor-in- Place (VIP) for pavement and Bridge Repair Units (BRU) for bridges). Also at risk are the other 100% state funded programs (Let's Go CT Ramp Up, FIF Roadways, FIF Bridges, and Capital Resurfacing), along with many 100% state funded Public Transportation projects. Determining exact projects that cannot advance would entail a similar analysis to that undertaken during SFY 2018 in response to the STF solvency issue, whereby approximately 300 projects, totaling \$4.2 billion were put on hold.

Attached is a list of projects that have been advertised, but not yet awarded, which will be reviewed to determine whether they need to be delayed, pending a decision regarding a bonding cap. This includes the Charter Oak/I-91 NB Interchange 29 project, as well as the Clinton Railroad Station, numerous bridge rehabilitations, and a pavement preservation project. The attached Advertising Report includes the projects the Department plans to advertise in the next year, based on available federal and state authorizations. The imposition of a bonding cap at \$750 million for FY 2019 and \$800 million for the coming years means that many of the projects included in these lists will need to be delayed several years.

State-of-good-repair for transportation infrastructure

The Department has developed a Transportation Asset Management Plan (TAMP) for 6 asset classes for highway infrastructure. The TAMP uses deterioration curves based upon historical data to predict future asset condition. Different investment strategies can then be applied to the model to show expected outcomes. Projections for 3 investments strategies (no funding, current strategy of \$375 million per year, and a preferred strategy of \$875 million per year) were developed for each of the 6 asset classes. Performance projections for each asset are attached.

As mentioned above the proposed bonding limits may limit the capital program primarily to the state-matched federal program for the next several years. This will mean a significant funding reduction from the current investment strategy assumed in the TAMP and render the preferred strategy unobtainable until new revenues are found. Most importantly, the condition of the state's transportation infrastructure will continue to deteriorate. **More than 15% of the state's bridges are currently and will remain in poor condition, increasing to 20% in poor condition by 2025. For pavements, approximately 10% of the non-interstate state roads are in poor condition today. By 2025, 15% of these roads will be in poor condition.** The deterioration rates for the other asset classes are comparable, if not worse. The Let's Go CT! initiative targeted about 2/3 of the program (\$2 billion per year) towards state-of-good-repair projects. Data from the TAMP confirms that this figure was not far off.

Deferred Maintenance and Deferred Projects

Assuming the Department is able to continue to provide the state match for the federal programs, the focus of the federal program will pivot to primarily a system preservation and state-of-good-repair program. The size of the federal program for highways and transit is approximately \$750 million per year. The state match is typically 20% of the total project cost resulting in an overall federal program of nearly \$1 billion per year. Not all of these funds can be used for state-of-good-repair projects, but for argument sake say that were the case. At \$1 billion per year of available federal funds, a shortfall of \$1 billion remains toward the \$2 billion annual need. The deferred maintenance will accumulate until new revenue is found and new programs are initiated to address this unmet need. **By 2023 the deferred maintenance cost will approach \$5 billion.**

As discussed above, the bonding limitations will eliminate most, if not all, of the state funded programs. Some of the preservation needs may be addressed through federally funded projects, however there are many state-only funded improvement projects which address congestion or improve safety which will not advance. As mentioned above, during late 2017 and early 2018 when the STF solvency was at risk, the Department undertook a comprehensive review of all projects under development and placed approximately 300 state-funded projects valued at \$4.2 billion under review for possible delay or cancellation. A similar effort would be required in this instance, with similar effect. **Deferred projects would likely total \$4 to \$4.5 billion.**

Risks

If the Department were required to redirect its federally funded state-matched program to address primarily state-of-good-repair projects, a number of current projects would be cancelled or deferred. In such instances there may be **payback obligations to the federal government which could total \$100 million, or more.** In particular, the Walk Bridge Program is funded through a mix of state and federal dollars. This \$1 billion program may not be affordable under the proposed bonding limitation, which potentially may require repayment of approximately \$50 million of federal funds expended to date. This is just one example.

Impacts to Others

With the passage of the Let's Go CT! and Ramp Up legislation the engineering community and construction industry have been building capacity to deliver an expanded capital program.

Restricting the size of the Department's capital program for 4 or 5 years would have a devastating effect on our industry partners. It may take years to recover from the impact of the lost talent and reduced industry capacity, even if additional revenue is provided in the future.

The Department has many stakeholders. As part of its project development process public outreach is conducted at various times. Abandoning projects during project development breaks the public trust and injures the Department's reputation. On a larger scale, the November 2018 election overwhelmingly endorsed a Lock Box for transportation funds. The current proposal would seem to be inconsistent with the Lock Box election results.

New STF Revenue

Under the proposed bonding scenario there will be an increasing volume of deferred maintenance and backlogged projects which will accrue until such time as additional revenue is identified for the STF. The Department has considered the potential of tolling of limited access highways to provide such a revenue stream. Preliminary study has shown that a tolling program for I-95, I-84, I-91 and portions of Route 15 could yield significant revenue. The development

costs for such an extensive toll system are significant – approaching \$300 million. The time to plan, gain regulatory approvals, design and construct a toll system has been estimated to take 4 years, with partial revenue service in Years 5 and 6. Full revenue operations would be achieved in Year 7. The net revenue from toll operations has been estimated at approximately \$150 million in Year 5, \$670 million in Year 6, and \$840 million in Year 7 (and thereafter). Note: the net revenue figures are cash in the STF which potentially could be leveraged to a larger amount through a bonded program.

Additional STF revenue will allow the Department to expand its capital program to begin to address the deferred maintenance and backlogged projects. It will take some time for the industry to increase capacity to deliver the expanded program. Alternative contracting may allow some of the work to be expedited by attracting resources from outside CT. Nevertheless **it is estimated that at least 3-5 years will be required to address the deferred and backlogged work.** During that time major initiatives will be advanced from planning to final design. It is expected that **revenues of \$850 million per year would allow major transportation initiatives to move forward.** Obviously, not all projects would move forward simultaneously, but rather would be prioritized and sequenced in an orderly fashion. A list of major transportation programs and initiatives that toll revenues might enable is attached.